

Indeed, water power is a mainspring of industrial progress in the central provinces, which have no indigenous coal supplies. Table 2 shows the provincial distribution of available and developed power in Canada.

2.—Available and Developed Water Power in Canada, by Provinces, Jan. 1, 1927.

Provinces.	Available 24-hour power at 80 p.c. efficiency.		Turbine installation.
	At ordinary minimum flow.	At ordinary 6-months flow.	
	<i>h.p.</i>	<i>h.p.</i>	<i>h.p.</i>
British Columbia.....	1,931,142	5,103,460	460,562
Alberta.....	475,281	1,137,505	34,107
Saskatchewan.....	513,481	1,087,756	35
Manitoba.....	3,270,491	5,769,444	227,135
Ontario.....	4,350,300	6,808,190	1,790,588
Quebec.....	6,915,244	11,640,052	1,915,386
New Brunswick.....	50,406	120,807	47,231
Nova Scotia.....	20,751	128,264	65,702
Prince Edward Island.....	3,000	5,270	2,274
Yukon and Northwest Territories.....	125,220	275,250	13,199
Total.....	18,255,316	32,875,998	4,556,219

The figures in columns 1 and 2 in the above table represent 24-hour power, and are based upon rapids, falls and power sites of which the actual existent drop or the head possible of concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or less power capacity, which are not as yet recorded, are scattered on rivers and streams from coast to coast and will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true of the less explored northern districts. Nor is any consideration given to the power concentrations which are feasible on rivers and streams of gradual gradient where economic heads may be created by the construction of power dams, excepting only at points where definite studies have been carried out and the results made matters of record.

The figures in column 3 represent the actual water wheels installed throughout the Dominion, but these figures should not be placed in direct comparison with the available power figures in columns 1 and 2 for the purpose of deducing therefrom the percentage of the available water power resources developed to date. The actual water wheel installation throughout the Dominion averages 30 p.c. greater than corresponding maximum available power figures calculated as in column 2. The figures quoted above, therefore, indicate that the "at present recorded water power resources" of the Dominion will permit of a turbine installation of 41,700,000 h.p. In other words, the present turbine installation represents only 10.9 p.c. of the present recorded water power resources.

The above figures may be said to represent the minimum water power possibilities of the Dominion. To illustrate, detailed analyses of the water power resources of the provinces of New Brunswick and Nova Scotia have disclosed most advantageous reservoir facilities for regulating stream flow. It is estimated that the two provinces possess within their respective borders 200,000 and 300,000 commercial h.p. These figures provide for a diversity factor between installed power and consumers' demands.

Recent Increase in Turbine Installation.—Table 3 shows the yearly increase in turbine installation by provinces from 1910 to 1926 inclusive. During the four years immediately preceding the war nearly 1,000,000 h.p. was installed, during the following eight years approximately the same installation occurred, while in the last three years the gain was over 1,360,000 h.p.